



May 08, 2018

Version 2

Catalog, nomenclatural acts and distribution of Scarabaeinae (Coleoptera, Scarabaeidae) from Ecuador V.2

DOI

dx.doi.org/10.17504/protocols.io.pysdpwe

William Chamorro¹, Diego Marin-Armijos², Fernando Z. Vaz-De-Mello³, Angélico Asenjo³

¹Universidad Particular de Loja, Investigador Asociado; ²Universidad Particular de Loja;

³Universidade Federal de Mato Grosso



William Chamorro

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.pysdpwe>

Protocol Citation: William Chamorro, Diego Marin-Armijos, Fernando Z. Vaz-De-Mello, Angélico Asenjo 2018. Catalog, nomenclatural acts and distribution of Scarabaeinae (Coleoptera, Scarabaeidae) from Ecuador. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.pysdpwe>

**Manuscript citation:**

Agassiz JLR (1846) Nomenclatoris zoologici index universalis, continens nomina systematica classium, ordinum, familiarum et generum animalium omnium, tam viventium quam fossilum, secundum ordinem alphabeticum unicum deposita, adjectis homonymus platarum, nec non variis adnotationibus et emendationibus. Jent and Gassman, Solothurn [Soloduri], Switzerland, 1133 pp.

Arias-Buriticá JA, Medina CA (2014) Tres nuevas especies de *Cryptocanthus* Balthasar, 1942 para Colombia. *Caldasia* 36(1): 165–180.

Arias-Buriticá JA, Vaz-De-Mello FZ (2013) *Dichotomius Ribeiroi* (Pereira, 1954) (Coleoptera: Scarabaeidae: Scarabaeinae): redescrpción y anotaciones taxonómicas de la especie. *Caldasia* 35(1): 209–217.

Arnaud P (1982a) Liste des types de Phanaeini du *Múseum national d'Histoire naturelle* de Paris. *Revue Française d'Entomologie* 4(3): 113–118.

Arnaud P (1982b) Description de deux nouvelles especes de Phanaeini (Col: Scarabaeide). *Miscellanea entomologica* 49.

Arnaud P (1996) Description d'une nouvelle espèce de *Coprophanaeus* du Brésil. *Besoiro* 2: 6–7.

Arnaud P (1997) Description de nouvelles espèces du genre *Coprophanaeus* Ols. *Besoiro* 4: 4–8.

Arnaud P (2000) Description de nouvelles espèces de Phanaeides. *Besoiro* 5: 6–8.

Arnaud P (2002a) Les Coléoptères du Monde, Vol. 28. Phanaeini. *Dendropaemon, Tetramereia, Homalotarsus, Megatharsis, Diabroctis, Coprophanaeus, Oxysternon, Phanaeus, Sulcophanaeus*. Hillside Books, Canterbury, England, 151 pp.

Arnaud P (2002b) Descriptions d'espèces nouvelles dans les genres *Coprophanaeus, Phanaeus* et *Sulcophanaeus*. *Besoiro* 7: 2–9.

Arnaud P (2002c) Descriptions d'espèces nouvelles dans les genres *Coprophanaeus, Phanaeus* et *Sulcophanaeus*, Désignation de Lectotypes et Néotypes. *Besoiro* 8: 2–5.

Arnaud P (2004) Commentaires et mise au poi

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: In development

We are still developing and optimizing this protocol

Created: May 08, 2018

Last Modified: May 08, 2018

Protocol Integer ID: 12018

Keywords: dung beetle, endemic species, maps, taxonomic historic, type specimens., scarabaeinae fauna from ecuador, scarabaeinae fauna, catalog of the scarabaeinae, distribution of scarabaeinae, scarabaeidae, ecuador the ecuadorian territory, scarabaeinae, ecuadorian territory, taxonomic history, coleoptera, ecuador, scarabaeine, choeridium ecuadorensis boucomont, galapagos island, new status as valid species, valid species, species, natural region, pinotus abnormi, deltochilum barbipes bate, deltochilum mexicanum burmeister, canthon moniliatus bate, uroxys latesulcatus bate, specific vegetation, mexicanum burmeister, canthon balteatus bohemian, notiophanaeus, uroxys rugatus boucomont, pinotus quinquelobatus felsch, pinotus monstrosus harold, pinotus hempeli pereira

Abstract

The Ecuadorian territory is divided into four natural regions: the coastal lowlands, the Andean highlands, the Amazon basin and the Galapagos Islands. Each of these regions has its own ecosystems and specific vegetation. The purpose of this work is to compile an updated catalog of the Scarabaeinae (Coleoptera: Scarabaeidae) of Ecuador that includes distributional data and several nomenclatural acts. We compiled data from 26 scientific collections, with the examination of 13,550 scarabaeines; additionally, 375 bibliographic references were reviewed for their taxonomic histories. The Scarabaeinae fauna from Ecuador contains 33 genera and 219 species, with 45 range-restricted (endemic) species and eight records erroneously attributed. The following nomenclatural acts are made: **new status as valid species** (3): *Canthon* (*Glaphyrocanthon*) *ohausi* Balthasar, 1939 **stat. n.**; *Deltochilum* (*Calhyboma*) *arrowi* Paulian, 1939 **stat. n.**; and *Dichotomius* (*Dichotomius*) *angustus* (Luederwaldt, 1923) **stat. n.** **New synonyms** (4): *Deltochilum* (*Deltohyboma*) *aureopilosum* Paulian, 1938 **syn. n.**; *Dichotomius* (*Dichotomius*) *provisorius* Luederwaldt, 1925 **syn. n.**; *Dichotomius* (*Dichotomius*) *hempeli* Pereira, 1942 **syn. n.**; and *Uroxys magnus* Balthasar, 1940 **syn. n.** **Revalidated names** (4): *Canthidium* (*Canthidium*) *orbiculatum* (Lucas, 1859); *Coprophanaeus* (*Coprophanaeus*) *florenti* Arnaud, 2002; *Dichotomius* (*Luederwaldtinia*) *fortepunctatus* (Luederwaldt, 1923) and *Phanaeus* (*Notiophanaeus*) *pyrois funereus* Balthasar, 1939. **Revised status** (1): *Canthon* (*Glaphyrocanthon*) *subhyalinoides* Balthasar, 1939. **New combination** (1): *Uroxys ohausi* (Balthasar, 1938) **comb. n.** **Lectotype designations (69)**: *Choeridium aeneomicans* Harold, 1868; *Choeridium connexum* Harold, 1868; *Choeridium ecuadorensis* Boucomont, 1928; *Canthidium aurifex* Bates 1887; *Canthidium centrale* Boucomont, 1928; *Canthidium coerulescens* Balthasar, 1939; *Canthidium inoptatum* Balthasar, 1939; *Canthidium lentum* Erichson, 1847; *Onthophagus onitoides* Perty, 1830; *Choeridium orbiculatum* Lucas, 1859; *Canthidium rufinum* Harold, 1867; *Deltochilum aberrans* Harold, 1868; *Canthon angustatus* Harold, 1867; *Canthon balteatus* Boheman, 1858; *Canthon balteatus* var. *lojanus* Balthasar, 1939; *Canthon delicatulus* Balthasar, 1939; *Canthon fuscipes* Erichson, 1847; *Canthon gemellatus* Erichson, 1847; *Canthon luteicollis* Erichson, 1847; *Canthon nitidicollis* Lucas, 1859; *Canthon angustatus ohausi* Balthasar, 1939; *Canthon plagiatus* Harold, 1880; *Canthon politus* Harold, 1868; *Ateuchus bidens* Fabricius, 1801; *Canthon semiopacus* Harold, 1868; *Canthon subhyalinus* Harold, 1867; *Canthon subhyalinoides* Balthasar, 1939; *Hyboma aequinotiale* Buquet, 1844; *Deltochilum erodioides* Harold, 1867; *Deltochilum tessellatum* var. *arrowi* Paulian, 1939; *Deltochilum barbipes* Bates, 1870; *Deltochilum aureopilosum* Paulian, 1938; *Deltochilum batesi* Paulian, 1938; *Hyboma dromedarius* Castelnau, 1840; *Hyboma hyppona* Buquet, 1844; *Hyboma arrogans* Buquet, 1844; *Deltochilum mexicanum* Burmeister, 1848; *Deltochilum orbiculare* Lansberge, 1874; *Deltochilum tessellatum* Bates, 1870; *Pinotus satanas* var. *angustus* Luederwaldt, 1923; *Pinotus provisorius* Luederwaldt, 1925; *Pinotus compressicollis* Luederwaldt, 1929; *Copris scalpellum* Taschenberg, 1870; *Pinotus abnormis* Luederwaldt, 1923; *Pinotus divergens* Luederwaldt, 1923; *Pinotus fortiepunctatus* Luederwaldt, 1923; *Pinotus monstrosus* Harold, 1875; *Pinotus podalirius* Felsche, 1901; *Pinotus problematicus* Luederwaldt, 1923; *Pinotus hempeli* Pereira, 1942; *Pinotus protectus* Harold, 1867; *Pinotus protectus* var. *tridentatus* Luederwaldt, 1923; *Pinotus quinquequedens* Felsche, 1910; *Pinotus quinquelobatus* Felsche, 1901; *Pinotus achamas* Harold, 1867; *Onthophagus dicranoides* Balthasar, 1939; *Onthophagus digitifer* Boucomont, 1932; *Onthophagus lojanus* Balthasar, 1939; *Onthophagus xanthomerus* Bates, 1887; *Phanaeus achilles* Boheman, 1858; *Canthon kaestneri* Balthasar, 1939; *Canthon moniliatus* Bates, 1887; *Uroxys elongatus* Harold, 1868; *Uroxys latesulcatus* Bates, 1891; *Uroxys magnus* Balthasar, 1940; *Pseuduroxys ohausi* Balthasar, 1938; *Uroxys pauliani* Balthasar, 1940; *Uroxys rugatus* Boucomont, 1928 and *Uroxys sulcicollis* Harold, 1880. Maps of geographical distribution of each species are provided.

Troubleshooting



1

2